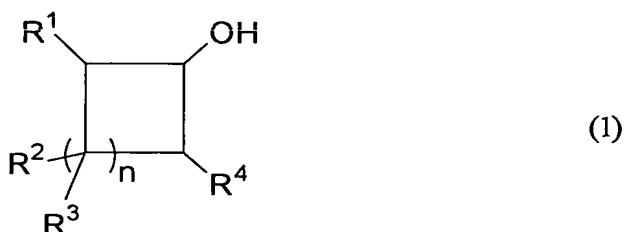


CLAIMS

1. A method for producing carboxylic acid, which comprises reacting an oily alicyclic alcohol or an oily alicyclic ketone with an aqueous hydrogen peroxide in the presence of a catalyst containing a metal compound belonging to Group 6 of the Periodic Table in a heterogeneous solution system.

2. The method for producing carboxylic acid according to claim 1, wherein the metal compound belonging to Group 6 of the Periodic Table is a metal compound of at least one member selected from chromium, molybdenum and tungsten.

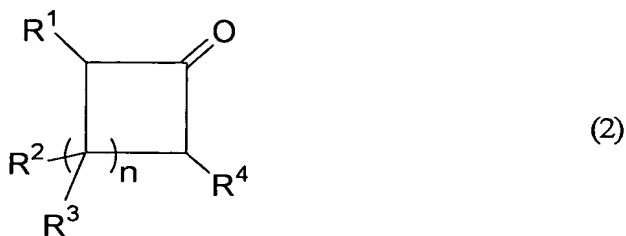
3. The method for producing carboxylic acid according to claim 1 or 2, wherein the alicyclic alcohol is a compound represented by the following formula (1):



wherein n is an integer of 1 to 18; and R¹, R², R³ and R⁴ are the same or different and each represents a hydrogen atom, a hydroxyl group, a halogen atom, a carboxyl group, an alkyl group having from 1 to 4 carbon atoms, an alkoxy group having from 1 to 4 carbon atoms, a cycloalkyl group having from 3 to 7 carbon atoms, an aryl group, an aralkyl group, an acyl group or an acyloxy group, or R¹ and R², R¹ and R³, R¹ and R⁴, R² and R³, R² and R⁴ or R³ and R⁴ may be taken together to form a carbon ring which may be substituted with an alkyl group having from 1 to 4 carbon atoms, an alkoxy group having from 1 to 4 carbon atoms, a cycloalkyl group having

from 3 to 7 carbon atoms, an aryl group, an aralkyl group, a carboxyl group or a halogen atom.

4. The method for producing carboxylic acid according to claim 1 or 2, wherein the alicyclic ketone is a compound represented by the following formula (2)



wherein n is an integer of 1 to 18; and R¹, R², R³ and R⁴ are the same or different and each represents a hydrogen atom, a hydroxyl group, a halogen atom, a carboxyl group, an alkyl group having from 1 to 4 carbon atoms, an alkoxy group having from 1 to 4 carbon atoms, a cycloalkyl group having from 3 to 7 carbon atoms, an aryl group, an aralkyl group, an acyl group or an acyloxy group, or R¹ and R², R¹ and R³, R¹ and R⁴, R² and R³, R² and R⁴ or R³ and R⁴ may be taken together to form a carbon ring which may be substituted with an alkyl group having from 1 to 4 carbon atoms, an alkoxy group having from 1 to 4 carbon atoms, a cycloalkyl group having from 3 to 7 carbon atoms, an aryl group, an aralkyl group, a carboxyl group or a halogen atom.

5. The method for producing carboxylic acid according to any one of claims 1 to 4, wherein the carboxylic acid is glutaric acid, adipic acid or pimelic acid.